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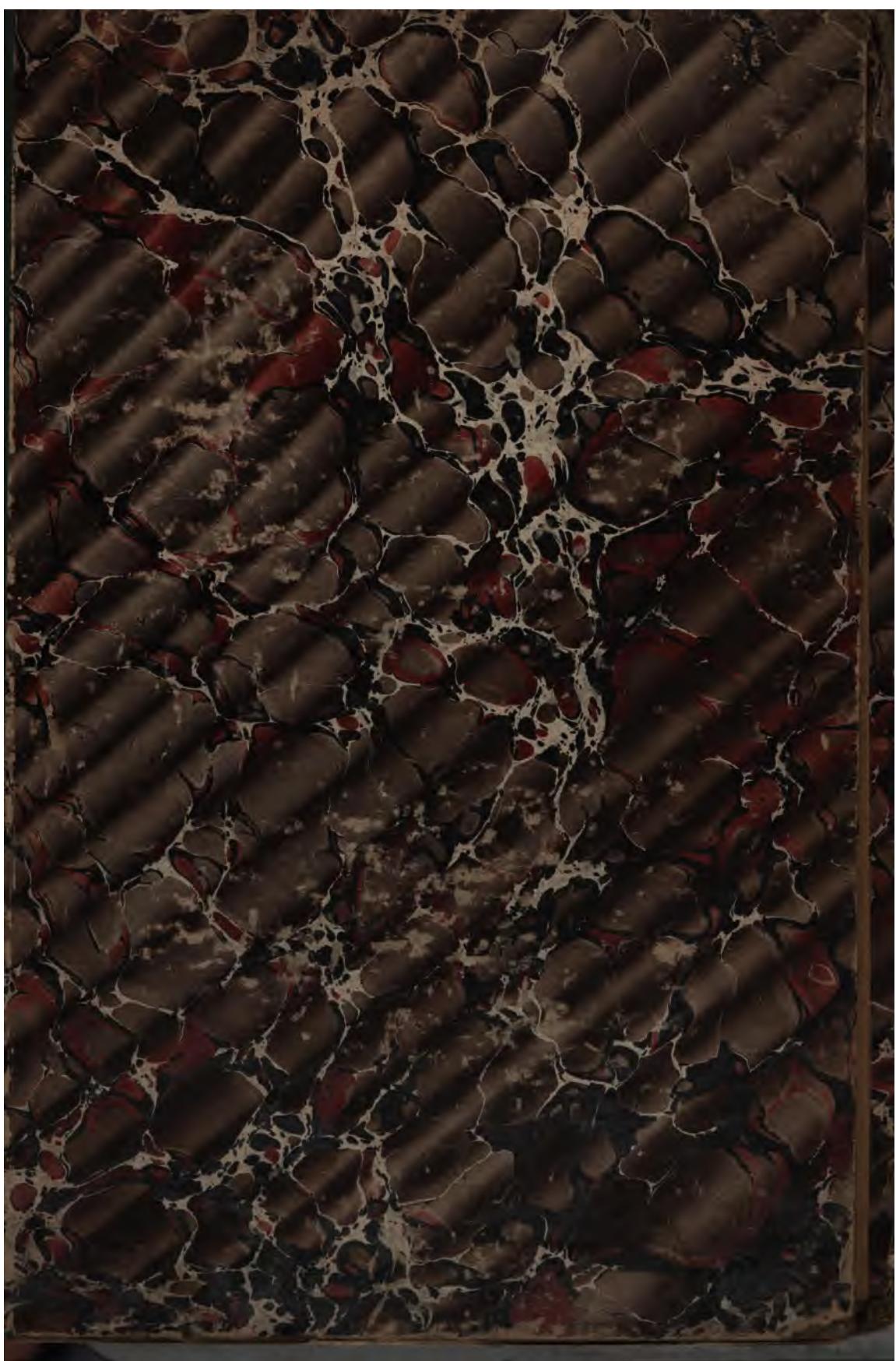
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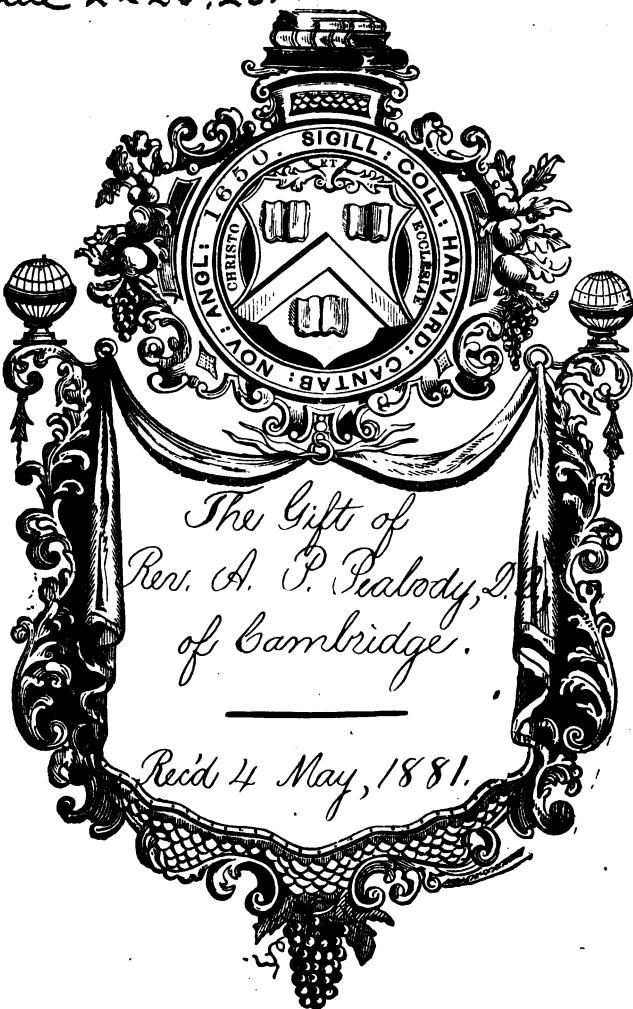
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INDUSTRIAL ART EDUCATION:

A LECTURE

DELIVERED IN PHILADELPHIA, APRIL 23, 1875,

BY

PROF. WALTER SMITH,

STATE DIRECTOR OF ART EDUCATION FOR MASSACHUSETTS.



BOSTON:
L. PRANG AND COMPANY.

1875.



L. PRANG & CO.

Art and Educational Publishers,

47 FRANKLIN ST.

BOSTON, NOVEMBER, 1875.

DEAR SIR:

We respectfully invite your attention to the accompanying pamphlets relating to Industrial Drawing, a subject which is now receiving much attention at the hands of teachers and school officers.

In regard to the course of instruction in Drawing, prepared by Prof. Walter Smith, State Director of Art Education for Massachusetts, and published by ourselves, we would call especial attention to the following points:

First. It has the largest adoption of any system of Drawing published in this country; indeed, in this respect, it exceeds all other systems put together.

Second. It has the endorsement of the leading educators of the country as a thoroughly educational, scientific and practical course of instruction.

Third. It can show the most ample testimony as to its producing the most satisfactory results in all grades of schools, from Primary to High schools.

Fourth. It is the only system before the public which is prepared by a thoroughly trained and experienced teacher of drawing; and which embraces all the features of the study in a logical and educational manner.

Fifth. It forms the basis of the instruction in the Massachusetts Normal Art School; and in the training class of the Art School of the Cooper Union, New York, the two principal training schools of the country for teachers of drawing.

Sixth. It is a system which can be introduced readily, and at no great expense into public schools.

Let it be borne in mind in introducing Drawing into public schools, that no good results can be reached by introducing the study in any half-hearted way. There must be some regular provision made for it in the course of studies; and it must be made a grade study. The regular teachers who should give the instruction should be informed in regard to its details and scope, and the best methods of teaching it. Such practical information is given fully in Prof. Smith's Manuals for Teachers, which will enable even those who have had no experience in teaching Drawing, to understand its features and principles. Nevertheless it will be economy in the end, and will ensure good results beyond question, if the teachers are provided with good elementary Normal instruction in Industrial Drawing, by a competent teacher of Drawing.

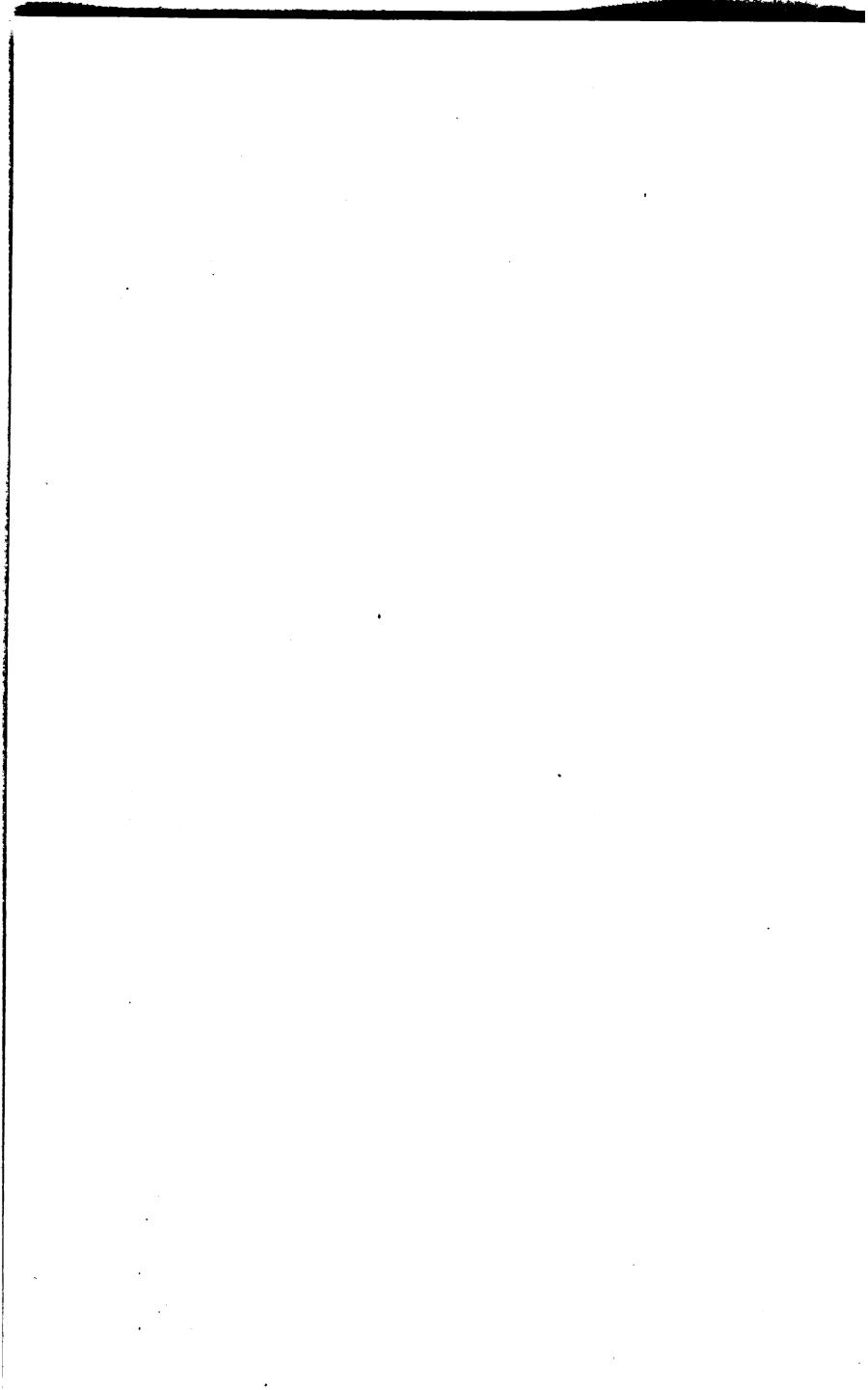
Good teachers can now be had to give such preliminary instruction, who have been trained at the Massachusetts Normal Art School, or at the Cooper Union Art School, New York.

Sample copies of the Primary and Intermediate Courses, with Manuals for teachers, sent for examination to any address on the receipt of \$1.50.

For full particulars in regard to terms of introduction of Prof. Smith's text books, and for teachers, address

L. PRANG & CO.
ART AND EDUCATIONAL PUBLISHERS, BOSTON.

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STATE DIRECTOR OF ART EDUCATION FOR MASSACHUSETTS.

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Edue 2225.20.3

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Mr. J. G. M.
H. C. S.
Kirti Ch. S. David S.C.
3661 India.
(K. C. 15.6)

CORRESPONDENCE.

PHILADELPHIA, March 29th, 1875.

DEAR SIR:

Having observed the valuable work which you have done to promote the cause of Industrial Art Education in this country, and the interest which has been awakened in this highly important subject, we would feel greatly obliged to you if you would visit our city, at such time as may suit your convenience, and deliver a Lecture explanatory of the system you have applied so successfully in Massachusetts.

We are sure that such a Lecture from you will be a substantial benefit in assisting the objects of all the institutions in this city established for the promotion of the Arts, especially the following, in which we are personally interested, viz: The University of Pennsylvania, The Pennsylvania Academy of Fine Arts, The Franklin Institute, The School of Design for Women, The American Institute of Architects, and The Social Art-Club of Philadelphia.

We have the honor to remain

Very truly yours,

WILLIAM SELLERS,	JAMES L. CLAGHORN,
J. VAUGHAN MERRICK,	WILLIAM STRUTHERS,
HENRY C. GIBSON,	FREDERICK FRALEY,
FAIRMAN ROGERS,	SAMUEL WAGNER, JR.,
JOHN WELSH,	JOHN SARTAIN,
JAMES S. WHITNEY,	F. ODEN HORSTMANN,
JOHN E. COPE,	WILLIAM PLATT PEPPER,
FRANK FURNESS,	H. D. WAGNER.

To PROF. WALTER SMITH,

State Director of Art Education for Massachusetts.

BOSTON, April 5th, 1875.

GENTLEMEN:

I have received your invitation to visit Philadelphia and deliver a Lecture on Industrial Art Education, with much pleasure.

It has long been my wish to see a city which was so familiar to me, by name and character, before I came to reside in this country. The busy life we lead

here has so far prevented me from visiting Philadelphia, but your invitation makes an opportunity which I willingly accept, the more readily in that it gives me an object for my visit, in the pursuit of which I have hitherto spent my life.

I had intended in any case to spend some time in your city next year, during the Centennial Exhibition, for a large number of my old friends in England, who have long been waiting for an excuse to visit this country, will be here to see the civilization of America displayed by herself on her own soil.

Those who have watched, as I have, the influence of such exhibitions in Europe, will not be surprised that the Institutions you represent should already consider the question of Industrial Art Education, the general establishment of which must be one of the inevitable results of the Exhibition.

I can be in Philadelphia on April 22d, and could deliver an address on the following day, April 23d, at such time as you can arrange.

I am, gentlemen,

Yours faithfully,

WALTER SMITH.

To Messrs. William Sellers, James L. Claghorn, J. Vaughan Merrick, and others.

INDUSTRIAL ART EDUCATION.

[*From Penn Monthly for July, 1875.*]

THE general topic on which I have to address you is Industrial Art Education, and I propose to say a few words upon each of these three heads; *First*, what Industrial Art Education is; *Secondly*, whether it is possible to establish it in our public schools; and *Thirdly*, to tell you how it is thriving in the State of Massachusetts, where the subject is under my general direction. First, why is it that this subject, which for so long a time has evoked little or no attention, is especially of interest just now, and why is it that in almost every State in this country it is being discussed in one form or another? Having taken some trouble to inquire into the cause of this sudden increase of interest in the subject, I am led to say that it may be accounted for principally by the fact that within the last twenty years the people of this country have become a great traveling people. No other nation has so many travelers; the number of Americans going to and returning from Europe, at the port of New York alone, being from fifty to seventy thousand per annum. These persons go abroad for some specific purpose, sometimes for pleasure, sometimes for inquiry, and they come back with very definite impressions, which they communicate to the people about them. And it appears to me, that one cause of the general interest at this time on the part of educators in this subject of drawing, is the result of this habit of traveling abroad which has brought our educated people into contact with the school system of foreign countries. If you talk to any intelligent educator upon his foreign observations, you will find that while he details to you his examinations into the systems of education pursued in the universities, public schools and technical schools of other countries, he will seldom express dissatisfaction with the public school system of this country. Just as strangers, who come here from abroad, go back with very definite and very favorable impressions concerning a subject about which they learn more here than of any other—namely, the management and conduct of public schools—so

Americans, upon coming back from Europe, while expressing satisfaction with American public schools, also express their wonder that the manufacturing and industrial communities of this country should have been able to go on so long and so successfully without that particular form of assistance to industry represented by Industrial Art Education. Then, too, a large number of Americans visit International Exhibitions, and, upon observing the products of other countries, comprised in the educational, scientific and artistic displays, are compelled in candor to admit that America has not taken that position in Art and Art Industry, which she delights to take in respect to some other subjects; and having seen their country at the foot of the column in these respects, some of them upon returning have sought to remedy this state of things. Thus we have in some of the New England States men who, after examining this subject abroad, have concluded that the time has come when there should be added to their system of public instruction the one feature which it lacks, that of technical education.

The progress of England in this matter, during the short time in which attention has been called to it in that country, is a subject of frequent remark. Those who visited the exhibition of 1851, for instance, saw a condition of Industrial Art in England, which was little better than a condition of barbarism. I have seen myself in the cottages of the laborers, and even in the houses of the middle classes, nondescript articles called ornaments—chimney ornaments—which were certainly not so far advanced in art as are many of the works of the Sandwich Islanders. They were simply barbarous imitations of animal forms, such as really were a disgrace to any civilized people; and the condition of public taste was so low that the old charge of the country being “a nation of shop-keepers” was really a fair charge. Then came another exhibition eleven years afterwards, in 1862, and those who witnessed both exhibitions saw an extraordinary change, not only in the character of Industrial Art, but consequently in the money value—and that was one important test—in the money value of the products of the country. This caused so much inquiry that even the great art producing people, the French, began to ask what it was that caused the great advance.

Then came the third exhibition, that of 1867, and it was then

conceded on all hands that in the essential requisites of value, of form and of taste in manufactures, and in the handling of materials, Great Britain was, in the matter of Industrial Art, the equal of any nation in Europe; and thus the country which in 1851 was far in the rear, had come into the front rank.

Such a change, and one brought about in so short a time, must be a matter of interest to ourselves here, who have just taken up this question; and therefore, before attempting to give you a description of what we are endeavoring to do in the New England-states, I propose, with your permission, for a few moments, to describe to you precisely how that change was brought about in Old England. In the first place, there was a time when the manufactured products of Great Britain were very generally preferred in many countries, because they represented a certain quality of material; they were honestly made; they would wear; and there had been a certain monopoly in many kinds of fabrics and objects, in the manufacture of which honesty and skill alone were required and taste had little influence. But, toward the end of the first quarter of the present century, there came a change. People in many countries of the world who had put up with very ugly things because they would wear, began to require something in addition to the usefulness of the object—that it should be attractive. In 1836, the Board of Trade, looking at the question as one purely of a business nature, began to consider what should be done to bring back to the country the trade in manufactured articles which it was rapidly losing, and losing simply by want of taste in the manufacture. It was said that even the savages began to give up the wearing of articles of apparel made by English manufacturers. The Board of Trade took the matter up; not from any philanthropic impulse, to secure the extension of educational facilities, nor from any patriotic desire to excel in the arts as compared with other nations, but simply as a measure of self-preservation. And that is precisely the ground on which I advocate Industrial Art Education here. The first effort that was made to secure this return of trade was by the introduction of good design into manufactures. And how was that attempted? It was attempted in a way which, after fifteen years of trial, was abandoned as an utter failure. The first thing that the Government did was to assist in the establishment in all the great manu-

facturing cities of schools of design, in which instruction in designing and in drawing was to be given to adults, or to any young man or woman applying for such instruction ; the applicants being required to be above a certain age. These schools were conducted from 1836 to 1851, and at great expense to the Government. In 1851, at the great exhibition, their influence was fairly weighed in the balance, and they were pronounced a failure. Although conducted by skillful teachers and supported handsomely by the Government, and having the localities in which they were situated in sympathy with them, the actual result was that they were pronounced a failure. Prior to the establishment of these schools, it was almost impossible to find a designer in any workshop or factory who had been born in the country. There were few exceptions to this rule ; the simple fact was that if a designer or a skilled workman was required, he was imported ; and it was thought that if the Government established schools of design and supported them, and if special industries requiring great skill were supplied with talented designers, the consequence would be that a remedy would be found, and English art would be elevated. But, as I said before, in 1851 the whole system was tested, and the test demonstrated it to be entirely inadequate to remove the evil of a want of good design.

Then came the testing of a second experiment, and this time the idea was advanced by a business-like educator who had given this question some consideration, that leaving out of view the fact of a want of patriotism in the nation in always looking abroad for sources from which to supply the brains and skill required in our home industry, the remedy could not be found in importing foreign designers, nor was it to be accomplished either by schools of design for adults or in giving them special instruction. He started with the theory that the only way in which we could remove the disgrace and furnish the manufacturers with a demand for, as well as a supply of, good taste, was by educating the whole people—by establishing a Museum of Art, training skilled students to become teachers of drawing, and insuring that every person born in the country should have an opportunity for developing his artistic taste—those having remarkable power to have the additional opportunity afterwards afforded them to display their special power, in technical schools of art and science. And here I would

remark that the mistake made in the first experiment was that the supply was given before the demand existed. The education of skilled designers to produce beautiful work was destined to be of little value if the people themselves were left in such a barbarous condition of public taste, that they preferred the bad to the good. If a vulgar taste or want of education led the masses of the people to prefer a bad design to a good one, there was no encouragement given to manufacturers who produced good work. A little incident which I will give from my own recollection will show you that this want of taste was not confined to the homes of the working classes, or of the middle classes, or to those places in which, from a lack of educational facilities, we would naturally expect to find it. One of the means by which the people were to be shamed into rejecting ugly things and choosing beautiful things was the public exhibition of bad designs; and with this object in view, an apartment was set apart in what was then a museum for all kinds of art (now known as the South Kensington Museum,) in which bad designs, some of the very worst objects that could be purchased in the open market, were nailed up for public inspection. These the people were given every opportunity of examining, so that the more noticeable defects of a vulgar taste might be apparent and might eventually be more generally avoided. It was rather a dangerous experiment, because almost all persons who came into that room saw displayed some particular weakness of their own. Besides that, the defects were not confined to the objects or ornaments bought by the working classes. One of the objects on exhibition was a magnificent rug, manufactured by Sir Francis Crossley, of Halifax, the great carpet manufacturer of the West Riding of Yorkshire. It was an imitation of a picture by Sir Edwin Landseer called the Monarch of the Glen—a stag magestically rising from his native heath. This design was considered defective, inasmuch as a flat surface should represent flatness; and it was not considered in good taste that when we drew up in a circle round the family hearth we should put our feet on "monarchs of the glen," rising up as if ready to spring upon us. In order to apply this to all classes of manufacture, the costly as well as the cheap, this magnificent rug was purchased and nailed up. Among the first to visit the exhibition afterwards was the manufacturer himself, who, upon observing the object,

quietly remarked to the directors, "I would recommend you upon the whole to remove that rug." "For what reason?" he was asked. "Why," said he, "it happens to be the hearth-rug which a lady in a most exalted position has just chosen for her own boudoir, and I do not think she would like to see it nailed up as a trophy of bad taste." I am sorry to say the Chamber of Horrors did not continue in existence for a very long time. The pressure against it was too strong. It did one good, however. It showed us that we could help to improve public taste by displaying what was bad taste, as well as by indicating what was good taste.

In the period between 1851, the year in which the inferiority of the country became most apparent, and 1862, a great change took place in the management of this educational matter. It was made possible, under the laws relating to national schools, that every child should have an opportunity of learning to draw; the theory being that if equal facilities were extended to all children alike there would be some who would make the most of the opportunity thus afforded, and who would develop more than ordinary power. The proof of the success of the experiment was seen in the International Exhibition of 1867, when, as I before said, the whole aspect of this question of Industrial Art was entirely changed and elevated. Our situation in America is at present somewhat similar to that which I have attempted to describe in England. We are beginning to take up this question of Industrial Art in a serious way; and with the experience of other countries before us, regarding experiments in which they succeeded as well as those in which they failed, there can be no particular reason why we should, like them, throw away fifteen or twenty years of time in mere experimenting, unless our circumstances are totally different from theirs; and I claim that this is not the case. This leads me to say that the theories which have been propounded in some quarters on this subject, would lead us directly into that wilderness of delusion in which some of the European countries wasted much valuable time before they hit upon the right way. Of these theories, one is that instead of teaching the whole mass of our public school children to draw—which is claimed to be impossible—we should go around among the schools and pick out the talented children and put these in special schools; that we should pick out those who at an early age display an ability to

sketch, and give them a good education in drawing, and let all the rest go. That is precisely what was done in England, and is precisely what proved to be a failure, and had to be given up. It seems to me it would be equivalent to establishing colleges for a few picked pupils, instead of making a constituency for those institutions by establishing a sound general education.

Then there is another consideration, and that is, who is to decide in advance as to the qualifications of a pupil? What educator, what parent, what philosopher can enter a public school and pick out those children who, after the lapse of ten or fifteen years, are to succeed in any branch of education? Furthermore, supposing they had the power to do this, conceding to them an infallibility equal to any that is claimed by the Pope, and allowing them to pick out every boy in a school who is going to become a great mathematician or scholar—to pick him out and send him to a college, leaving all the rest uneducated—then I ask, upon exactly what moral principle do you refuse to teach a boy who is not going to prove very highly successful? The talented boys being taken out of the class, whatever class it may be, you have in the boys who are left just those who ought to have the greatest pains taken with their education. This is a plan of arbitrary solution and it will not work. You cannot pick out any successful man in his teens except by accident. Self-culture is a gradual process, and some people very much improve as they grow older. Some of our greatest men have had a reputation for being thick-headed as children; and indeed thick-headedness in children may be regarded as a very great blessing, in so far as it is a means of protecting them from over-education when young. It is a mantle of protection which nature spreads over the people who are to become great, to guard them against and shield them from the hot-house forcing of powers not ripe for development. To condemn a child because it displayed no particular ability at a very early age would be unphilosophical, as well as cruel. Before education of children in drawing in the common schools has been secured, it would be a throwing away of money to attempt to remedy this evil of a want of taste simply by the establishment of art schools—which is no remedy. It failed in England, and will fail here. One art school for the development of talent in this city, in so far as it would remedy a want of taste or skill in the manufactures of

the whole country, would be like one drop of water thrown into the Delaware, or one bucket of water turned into the Atlantic Ocean. Instead of establishing art schools, the true remedy is to teach the people. When you have done this, the people will in due time establish those art schools and every other educational agency that may be needed. In proof of this, I refer to the experience in England, where, after fifteen years of government support, with this incubus of a want of good design hanging over the English people, there were only nineteen schools of design established in the whole country; while between 1851 and 1875, a little longer period, one hundred and twenty schools of art were established, and about eight hundred night classes similar to those we have established in New England. All these came from the demand, and the demand came from the instruction of children in public schools.

I think then it is generally acknowledged that in order to build up a public system of education, we are required to treat all alike, that any expenditure of the public money contributed by all the people should be for the education of all the people, and not for that of merely a few. My theory, deduced from actual observation as a teacher, is that out of the many come the few. I hold that we have no right in the public schools to teach specialties for the benefit of two or three individuals: what we have to do is to give all an education, so that all shall possess primarily the power of developing their best faculties in after life. The boy having a scientific turn of mind who aspires to be an engineer or inventor, the future artist whose taste lies in paintings or architecture, and the youth of all other professions that would be represented in the community, would be none the worse for a knowledge of drawing.

I say that the similarity between the condition of this subject in this country and that which existed in England, makes it manifest that in order to secure a perfect remedy for the evil complained of, we must follow somewhat the course there pursued, adapted to our own circumstances. We must catch the artist or designer in his youth, and proceed upon the principle that "as the twig is bent, the tree 's inclined." After five years of age, every day of a child's life that you leave uncultivated, makes it a

much harder task for a teacher to teach him, and much more difficult for him to learn.

In carrying out this reform in the public schools in England, there were many difficulties to be encountered. There was a general disbelief on the part of the public that every child could be taught to draw. It was usually considered there, and I believe it is to a great extent so considered here, that to succeed in drawing required a special endowment, a special gift. When a man who never tried to draw in his life, sits down and attempts to make a portrait or a sketch of some landscape, and finds that he cannot do it, he at once complains that he has no gift for drawing. Now if we apply that to reading, or any other ordinary accomplishment, what is the result? Let a man attempt to read who never saw the alphabet, and he will find it rather a hard task; but when you hear him say, as the reason why he gives up the effort, that he has "no gift" for reading, you will be apt to consider the remark as rather stupid.

The cause of drawing in the public schools was materially advanced by an experiment tried by a body of very practical people in England. I have not had the pleasure of an intimate acquaintance in this country with any one member of that body, called there and here the Society of Friends, or the Quakers; but in my work in England I was intimately associated with them for a considerable time, and came to know a great deal about them, and also to help them in this experiment. I dare say the race is not very different here, and that a fair description of an English Quaker would hit some prominent peculiarity of the Friends in this city. I think you will bear me witness when I say that a Friend, as a rule, objects to music, both instrumental and vocal; considers the one a waste of time, and the other a jingling of discordant elements; that he regards dancing and various other kinds of enjoyment as coming under the head of frivolous amusements, and never indulges in them nor will allow any of his sons or daughters to do so; and that he considers life a matter of so much importance that there is little enough time for the important duties, without wasting a great part of it on unimportant ones; and yet, as a matter of fact, the Society of Friends in England was the first public body that adopted Drawing as a subject to be taught to every child. A sternly practical body, the

educationists of that creed determined—and it was the first body that so determined—that whatever else children should learn, they must at least be taught to draw. Now that experiment solved two questions. It demonstrated that it was possible to teach all children, for it was found that exactly one hundred per cent. did learn to draw, and learned well; and it also demonstrated to the minds of a large number of people that, instead of being simply a source of amusement or a mere accomplishment, Drawing had been elevated to the position of one of the solid subjects of study, and one which ought to take its place among the practical utilizers of life. The defects of the system of special instruction for the benefit of a few soon made itself apparent. In the schools where only a few were taught, the most proficient of the pupils were selected to attend the public examinations that were held all over the country. A girl who displayed great beauty of sentiment in color, or a boy who had some skill in drawing animals or ships—in a word, the picked talents or geniuses, “the flower of the flock”—were sent into these public examinations, and against them were pitted these young Quaker pupils. Now what was found? It was found that one hundred per cent. of those who were taught as a part of their elementary education the subject of drawing, not as a specialty, but as one of the regular branches of study, did infinitely better than the picked geniuses, and their attainments in even the higher branches were much more satisfactory. On the other hand, the so-called talented scholars, those who had made a specialty of this subject, fell behind, and as a class passed the examination with indifferent success.

That was about the year 1851, and the general trial of the whole subject soon after followed. The school-masters of London were then asked to try the experiment of teaching the art to all the children of the public schools, and the only way by which this was accomplished was by their undertaking to give up one-half of the time spent in writing to this new subject of drawing. After a trial of one year, at a meeting which was held, these school-masters was asked to state their conclusions as to whether it was possible to teach all children, and their verdict was a unanimous one—that in giving to Drawing one-half of the time that would otherwise have been occupied in writing, the children wrote better and the Drawing was a clear gain. The time occupied by it,

something like one hour or one hour and a half per week, was a source of great comfort to the children, and drawing was an exercise which they enjoyed more fully than they enjoyed anything else. Now I might claim to be something of an authority on that point, because for a number of years I have been looking with a scrutinizing eye for some individual unable to learn to draw and, with the exception of persons afflicted in such a way as to be incapable of doing many other things, I have found none—not one. The only form of incapacity for learning to draw, which I recognize, is either that physical incapacity produced by blindness or paralysis, or that mental incapacity arising from idiocy or lunacy.

Now we meet with a great deal of nonsensical talk in regard to this subject of drawing. Not only is it assumed that there is a mystery about the subject, but the claim is made that some one man who is highly successful in the pursuit of art, is specially gifted and has a genius for it. One man, for instance, rises in public estimation as a physician and becomes very distinguished, whereupon the people call him "a genius." But what is the secret of his "genius?" I have examined somewhat into the lives of many great men, and have had the good fortune to have been acquainted with some; and having a little curiosity, I have tried to discover what this secret is. So far I have discovered, all men who have arrived at greatness in any of the walks of life have been distinguished for one common peculiarity; and that is, they always worked about twice as hard as other men. It is popularly supposed that this secret of genius is something that we cannot comprehend. My own belief is that like the secret of some societies, it is one that will always be kept, because there is nothing to divulge!

I am pretty sure that so long as we are left unprovided with wings, the only way for us to reach the top of any ladder will be up the steps; and the only safe way is to get up one step at a time. If, in looking at some individual on the top of the ladder of fame, and wondering how he got there, you are told that that distinguished man was born there, or came down in a balloon from the skies, you will, I think, be justified in disbelieving the story, and accepting, in its stead, something which is a little more compatible with the laws of physical force. Now, for twenty years I have been looking among my various pupils—and these have averaged

from three to six thousand every year—for that individual, who, giving himself a fair chance, tried to draw and was unable to learn ; and up to this time I have failed to find him. I think, therefore, I am justified in my belief that he does not exist. True, there are people who find it difficult to go on, who get discouraged and abandon their purpose at the first reverse ; and I have discovered this—that if there is one certain sign of future success, it is that of having less confidence in your own ability and your own gifts than in your determination to go on. Those who succeed the best ultimately, are not those who show the greatest amount of talent in the beginning. Were I required to pick out of a class of scholars the one whom I regarded as most likely to prove ultimately successful, I should perhaps pick out one stupid and thick-headed—so thick-headed as not to know that he was stupid—but who would go right on ; and as specimens of the class who invariably fail, I should pick out those who are on excellent terms with themselves, who do everything in an easy, sketchy, pretty way, and who would go on repeating it until they died, without making any improvement, simply because they are destitute of this determination to conquer, and are filled with a self-satisfaction resulting from over-confidence in their own powers.

Now let me call your attention to what we have tried to do in the city of Boston, and State of Massachusetts, in order to give this subject of Industrial Education a fair test in this country. In the year 1870, an act was passed by the legislature, requiring that every child should be taught the art of drawing, and in addition to that, that in every city having ten thousand inhabitants, or a greater number, night classes for Industrial Drawing should be established—requiring every city to establish what might be called an Industrial Art School, in which Industrial Art and mechanical drawing should be taught. This at once created a great demand for instructors, and our great difficulty has been to find competent and experienced persons for such positions. The difficulty has been to secure teachers competent to show, by their own skill in the art, what is meant by Industrial Drawing. The term itself had been especially chosen in order to overcome a great difficulty. The parents of the scholars had been very generally impressed with the belief that the kind of drawing which had been taught was of a non-instructive character—that drawing had been rather

a means of occupation for leisure hours, and had no distinct bearing upon anything that was of practical use to the pupil. In the law that was passed, the particular kind of drawing that was provided for was described as being Industrial, and that was the important feature—that the drawing should have a distinct relationship to the industry of the people; in other words, that it should be made of general utility and assistance in the daily avocations of the people. In pursuing our inquiries as to the means by which the art could be most effectively taught, the fact became apparent to those of us by whom it had not already been fully recognized, that this Industrial Drawing had laid the foundation of all success in industrial manufactures; and, therefore, in beginning to teach Industrial Drawing, we were obliged to include Geometrical Drawing, necessitating the use of compasses and a ruler.

Inasmuch as the scheme of instruction required that every pupil in the public schools should be taught, it followed necessarily that the regular teachers were obliged to do the teaching. It would have been impossible to find in the city of Boston alone a sufficient number of special teachers for all the pupils in the schools. It was therefore a necessary condition of success that every teacher in the public schools should be able to teach elementary drawing. It was also necessary that the subject should be graded, and it was accordingly graded from the first steps to the highest; and I regret that in this hall I have not an opportunity of showing you exactly how this was done. I could show you how, from the first stroke upon the slate up to a design for a manufactured article, that the progress is gradual; and that if you begin at the beginning and progress step by step, as the child does in the school, you would find that there is no point in the whole course where the study of drawing becomes difficult. In the primary schools, the child is taught the use of certain expressions, and the reason for this is that one-half of the work of drawing depends upon the child understanding the terms used by the teacher, and having his attention drawn to the nice distinctions which exist between one form and another; and therefore the geometrical forms are given like the alphabet, and are drawn in a way to show a certain amount of intelligence. To some of you it may seem cruel that before nine years of age a child should be required to make de-

signs, but you would not think so if you saw him going through that particular lesson. Indeed I do not know of a prettier sight than that of a primary class—children of from seven to nine years of age—filling their slates with what they call “original designs.” The teacher simply gives a square, circle, or triangle, to the children to draw, and then each pupil in the school is expected to fill that geometric form in some way that would make it attractive.

In addition to that, these little children are given lessons in drawing from dictation; without having ever seen the object which they are called upon to draw from the oral description of the teacher. In the grammar school, instead of drawing from copies on the blackboard, the children are taught to draw from the real objects. Instead of making very simple designs from dots or thick and thin lines, they make what are called elementary designs to fill given spaces from given subjects. In other words, a square, or any geometric enclosing form, being given, as well as a subject or unit of form, they are taught to fill that geometric form, to transpose a previous arrangement of the pattern, and so on. They draw from solid objects, in order that they may see what is meant by drawing from nature, the best preparation for that exercise being the drawing from geometric solids. The geometrical drawing exercises are made use of in order to insure accuracy of perception; and this leads me to remark that one great advantage resulting from a knowledge of drawing as taught in the public schools, is that it teaches the children to see. You may think that if you have eye-sight you are able to see, but that does not follow: you may be able to look, but it does not follow that you can see. You may have a picture on your eye, but it does not follow that you have it truly in your brain. This exercise of drawing, therefore, is going to have a more important influence upon every other branch of education than that which it has upon drawing itself, because it will educate the eyes of the children. There is one thing which I am more and more convinced of every day of my life, which is, that men or women who have not been taught to draw ought not to be believed on their oaths as to anything which they have seen with their eyes. They are unable to tell you definitely what it is they do see. When you ask them to show you in some tangible form what it was that they saw, and they show you something utterly distorted and unlike the original,

you are entitled to judge them by their own evidence of what they see, which is a distortion. The eyes of people educated in art see objects in a totally different way from that in which they are seen by others and the impressions which are received concerning the same object are in the two cases widely divergent. In the High Schools, this elementary work is carried on still further. Instead of drawing from models, as in the grammar schools, the pupils who are advanced enough, paint from nature, and practice shading from nature. Instead of learning geometrical drawing, they are to learn perspective, and instead of filling up certain outlines with various forms, under the head of elementary design, they study applied design, or design applied to industrial purposes.

By way of summarizing the courses of study which I have endeavored to describe, I will now repeat to you that, in the Primary schools, these pupils have exercises from the black-board, definitions of geometrical forms, design, dictation and memory-drawing. In the grammar schools, there are exercises in elementary design, drawing from models, geometrical drawing, with occasional exercises in dictation and memory-drawing. In the High schools, there are exercises in painting and shading from nature, in perspective and in Applied Design. We are preparing also for the study of Historic styles of ornament, and the botanical analysis of plants and flowers. Every pupil in the High school advanced classes is required to make at least two designs for some useful purpose, in the course of one year.

In addition to this course for the public day schools, there are the evening schools—these having been established more particularly as a means of capturing and helping that portion of the generation which has just escaped from school, consisting mainly of a large mass of young mechanics. From these schools, however, I expect less good to arise for the present, than from the day schools, because the students have not as a rule been taught to draw when young ; and my reason for this opinion is, that it is difficult and almost impossible for the pupils of these schools to give enough of time or to stay long enough to enable them to succeed: moreover, a child will learn more rapidly at nine than at nineteen years of age. The subjects taught here are Free-hand Drawing from the

flat and the round, Mechanical Drawing, Architecture and Building Construction, Applied Design, and Ship Draughting.

We have also a Normal Art School, which has been in existence for a little more than a year. The causes which led to the establishment of this school, were that when the act of the Massachusetts legislature was passed, the great difficulty in complying with it was the impossibility of finding good teachers. A painter, a sculptor, an architect, an engineer, is not necessarily a teacher ; a teacher is one who understands the elements of all these branches thoroughly, and who has the experienced power of making a pupil learn from his instruction. For a mixed class of twenty or thirty, it is essential that the teacher should be one who is familiar with all of these branches ; otherwise you will not have a teacher who is competent to teach every pupil in the class. The only cure for the difficulty of producing good teachers was the establishment of a normal school, in which the teachers should be required to go through a thorough course of training, which course should include the scientific branches as well as the artistic. The course of study is arranged to cover four years ; and is being carried out, as well as the time has permitted.

The point to which I would now call your attention is, the value of Industrial Art Education. I have already endeavored to show that it would have a value *educationally*, and now we come to consider what is its value *commercially*. There are many in this hall to-night who can contradict me if I overstate the fact, when I say that you cannot put into the hands of the working man, who has been taught their use, two more valuable instruments than a pencil and a pair of compasses. They will prove not only of value in their use to him, but of value to society. In all industrial occupations in which it is employed, the skillful handling of the pencil is of so much importance in determining the value of an article, that where such skill does not exist on the part of the working man, there is a serious loss—a loss to the manufacturer, a loss to the workman, and a loss to the purchaser. At Worcester, Massachusetts, where there were a number of machine-shops, and many mechanical trades carried on, the manufacturers say that a workman who is able to draw is worth to them thirty-three per cent. more than one who is unable to draw. They are prepared

to pay higher wages to a man who can draw well than they would be willing to pay to one who cannot draw. The reason for this is that the skilled workman loses no time, does not need to have some one over him to show him, and puts into his work an accuracy and finish which could be acquired only from an intelligent use of his instruments, only to be acquired by delicacy in drawing. In looking at a manufactured article, your attention is directed first to the quality of the material, and then to the character of the manufacture ; but not one of us ever bought an article without considering the question of taste, nor perhaps ever will. What is it that oftentimes makes one manufacturer successful and ruins another, but the presence or lack of taste in their goods ? Whether the manufactured article shall be ugly or pretty depends upon skill in design ; skill in design depends upon skill in drawing, while skill in drawing depends upon art education.

A few days ago I saw in the Art Museum of Boston a Persian rug which had been purchased for and was displayed in the museum as a sample of good taste. Its size was about six feet by four, and the price paid for it was \$400. That was not only its price, but its value—there is sometimes a distinction—and not only was it of that value, but it had been sold for a much larger sum in England, before it came here, and would sell for as much more if it went there again. I reflected that here was a rug which had been made by a people whom we are accustomed to regard as little better than half-dressed savages. As compared with the Persians, we should consider ourselves an aristocracy ; and yet these so-called half-naked savages made a rug worth \$400.

Now I reflected upon the extent of our own capacity in the same direction, and what would be the value of the same kind of a rug made by ourselves. I accordingly went to the nearest store and examined a variety of rugs, and was informed that the prices ranged according to size and quality of design, from twenty and thirty to fifty dollars. They contained all colors and made an ambitious display, and I found any one of them just as good for all practical purposes as this \$400 rug of the Persians. The only difference was that in the one case the rug had been made with some little taste in design and color, and in the other case there was little or no taste. In the city of Lowell I was told by a manufacturer that they paid something like \$60,000 per year for their

designs, which they principally import from abroad; and yet they are now discussing the question whether they should allow drawing to be taught in the public schools. I suggest that if other countries, when discussing that question, had decided against it, Lowell would have no need to discuss the question, because it would not have been in existence, inasmuch as its designs come from countries where drawing is taught in the public schools; and further, that if every designer imported from abroad was removed from the Lowell mills on the following day, the Lowell mills would have to shut up, and then the people would have plenty of time to discuss whether they would have drawing taught in the public schools.

The condition of France to-day is another illustration. Here is a nation that had been, one might almost say, despoiled and driven to the earth by her misfortunes, and yet to-day she is just as elastic as she was before her great war. This is simply because by her art education she has made the whole human race her subjects, and holds to-day in her hands the talisman which attracts you and me and all of us to Paris. We are simply slaves to her superiority. Political emancipation in one form took place in America one hundred years ago. Suppose we now try to emancipate ourselves from another kind of bondage to foreigners, and begin the second century of our national existence by resolving to develop what we know to be in us, and thus make ourselves industrially, as well as politically, an independent nation.

If I may be permitted to say a word to you as citizens of Philadelphia, it is this. You have here a great manufacturing city. I need no further assurance than what I have seen to-day to convince me that Philadelphia is destined to become one of the leading industrial cities of the world. I have endeavored to show you what England is doing for her manufacturing interests—interests precisely like those you have here. If we were to look to Germany and France, we should see similar efforts in behalf of art education going forward there. Now, how are you preparing to meet the competition in industrial products arising from this European education? You know better than I. But I can say that unless you are prepared to give equally thorough art education here, you must expect only defeat, even in your own markets, when you come in competition with your foreign competitors.

Mr. Smith closed his remarks by an allusion to the Centennial Exhibition, and commending the idea of a Memorial Hall, which it is intended to found in connection with the exhibition. He showed from his own experience in connection with similar institutions, how easy it was to fill such a Museum with objects of art character and interest, when once they were founded on a broad basis; and he offered the very practical suggestion, which seemed to meet the favor of his audience, that the people of Philadelphia should see that the Hall or Museum received liberal contributions from the industrial master-pieces sent to the Exhibition itself. He believed that, at no great cost, the most important works from the foreign exhibitors could be retained to permanently enrich its collection.

